dish NETWORK

Satellite Digital Carriage Issues

Overview

- Satellite Carriage Regime
- Statute is Ambiguous
- Cable and Satellite Comparison
- Case Study: San Francisco DMA
- A System-wide Impact
- Practical Considerations
- A DBS-specific Approach

Satellite Must Carry Regime

- Section 338 is silent on digital must carry rules for 48 contiguous states.
  - *Conference Report says that Congress "do[es] not take any position regarding the application of must-carry rules to carriage of digital television stations by either cable or satellite systems."*
- In contrast, Section 338 establishes clear satellite digital must carry obligations for Alaska and Hawaii
  - Digital must carry obligation went into effect June 2007
  - DISH Network in compliance at substantial expense
  - Alaska and Hawaii presented unique case: low population density, remote geographic location, and relatively few broadcasters

The Statute is Ambiguous

- In the absence of a clear statutory directive, "the Commission must read the statute to err on the side of avoiding constitutional infirmities." *2005 Cable Order*, ¶ 12.

- No factual record showing broadcasters would suffer "significant financial hardship."

- Unique burden on satellite.

Cable and Satellite: An Apples and Oranges Comparison

- Act provides for different carriage rules for cable and satellite reflective of technological and operational differences, 47 USC 338(J)

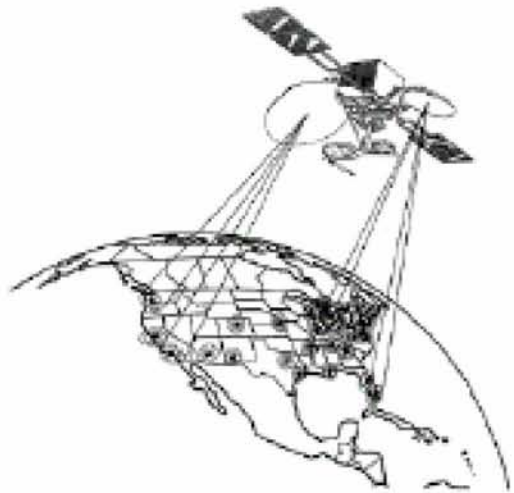
- Cable and satellite both deliver video, but
  - Cable providers have large high-capacity terrestrial pipe
  - Cable is not constrained by orbital slots, or limited frequencies.
  - Cable upgrades and infrastructure investment also used to provide new services (data, voice).

Satellite Technology

- Limited frequencies are divided into CONUS (national channels) and spot beam (local channels)
- 4 of our 15 satellites have spot beam capabilities to deliver locals

CONUS Beam

Spot Beams



Current Capacity Breakdown

Cable

Satellite

DISH Network Today

- Analog locals in 175 of 210 markets (over 1500 channels).
  - Includes must carry stations (as many as 18 per market)
  - One transponder holds approximately 12-13 SD channels.

SD Transponder Today

- Some HD locals provided in 29 markets
  - One transponder holds approximately 4 HD local channels.

HD Transponder Today

San Francisco: Today

- Launched market: 20 analog stations carried today
- 4 stations are carried in both SD and HD

7 SD Analog

13 SD Analog

4 HD

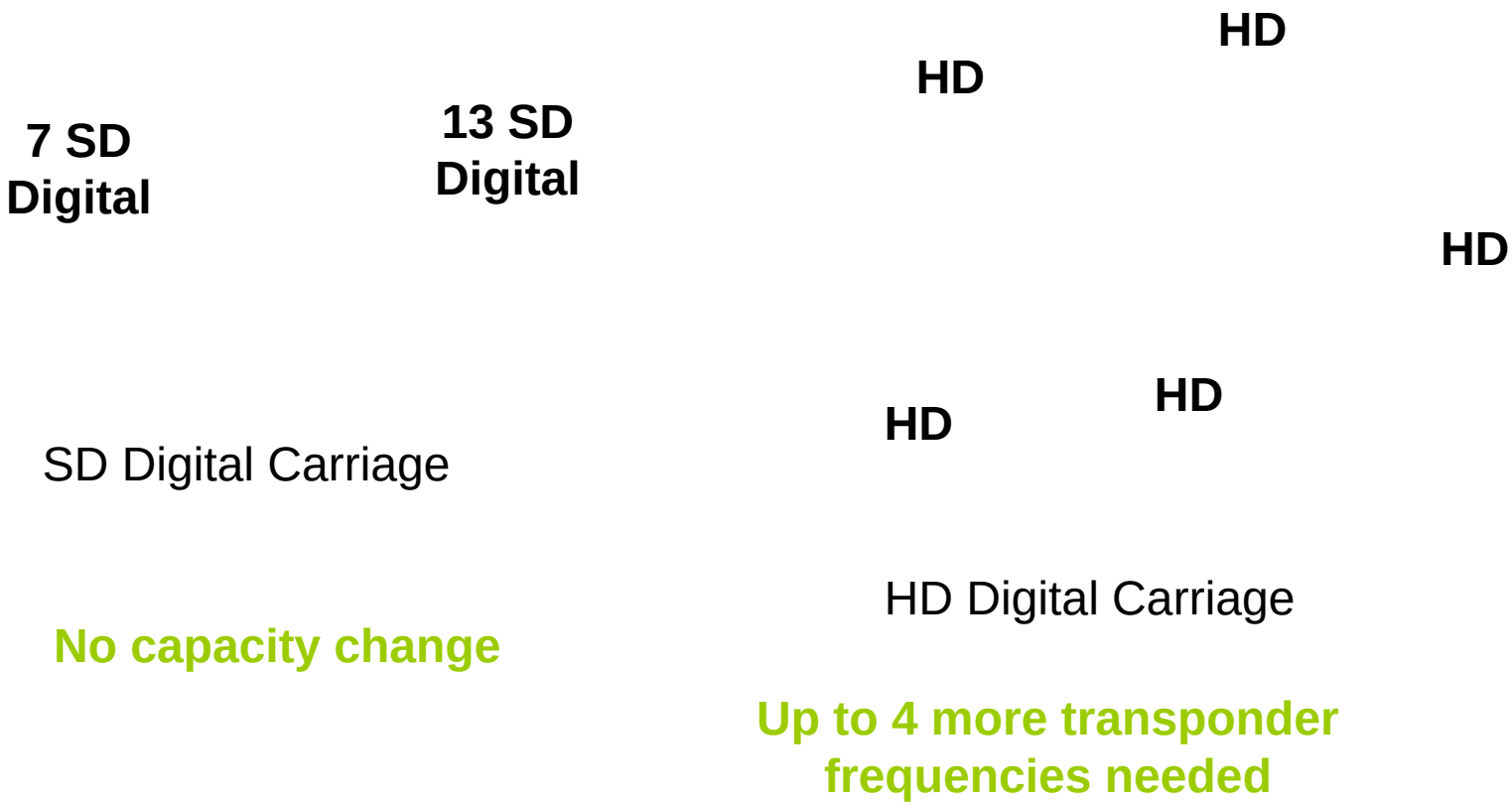
SD Analog Carriage

HD Digital Carriage

Service provided through spot beams on two satellites: three total transponder frequencies

San Francisco: Tomorrow?

- Assume 20 digital stations carried in SD and HD
- Assume no multi-cast obligation.



Ripple Effect System-Wide

- System-wide impact on 175 markets with 1500 local channels
- Back of envelope math: 3 SD networks = 1 HD network.
- HD obligation would require:

1500 SD channels

X 3 (HD factor)

4500 SD equivalents

Practical Considerations

- Launching satellites
  - Current system: launched 10 satellites in 12 years. Two additional satellites to be launched in next 12 months.
  - 3+ years to design/build/launch at cost of $350+ million each
  - Need access to sufficient frequencies/orbital locations
  - Need to integrate into existing satellite fleet: ensure minimal number of consumer dishes

- System-wide transition to MPEG-4
  - Would be insufficient as stand-alone solution
  - Would require new set-top box equipment and truck roll for vast majority of customer base
  - Manpower, equipment and cost prohibitive

A DBS-Specific Approach

- Cable regime is a poor fit operationally and legally;
- Unique burden on satellite providers;
- Ambiguous statute should be interpreted to minimize constitutional concerns;
- Explore alternative means to accomplish statutory objective: OTA antenna solution, downconversion, spectrum sharing, non-duplication limits, capacity cap similar to cable, national feeds, etc.